Abstract

Although organic beef marketing has long lagged behind that of organic products of plant origin, it has grown considerably since the late 1990s, when the large retailers entered the market. Whereas in 2000-2001 the value of the Australian certified organic beef was only $32 million (farm-gate prices), with less than two thirds going to the organic market, by 2005 the estimated production had doubled to around $60 million (farm-gate prices), with virtually all of the produce being sold in the organic market. About three quarters of this is currently sold through the domestic market. Dominant export markets have moved from Japan and the UK to the USA.

Keywords: certified, organic, beef, production, marketing, Australia

Introduction

In Australia, certification of organic agriculture has occurred since the late 1980s. Although organic products most in demand were initially of plant origin, the importance of animal products has increased over time.

From 1992, Australia has had an official National Standard for Organic and Biodynamic Produce. All products exported as organic must be certified according to at least the level of this standard by one of the organisations accredited by the Australian Quarantine and Inspection Service (AQIS). Although in the domestic market the word ‘organic’ is not legally protected, the organic industry recognises products certified by AQIS-accredited organisations as genuinely organic.

In Australia, beef is produced on both mixed and specialised properties. Some organic farmers and graziers never adopted the use of synthetic fertiliser and pesticides, and dealt with soil fertility and pest problems in other ways, such as through crop rotations, timing of farm activities, and through choice of seed and livestock. Most producers, however, converted from conventional to organic management and significant growth in the number of organic properties has occurred, especially over the past 10 years.

There are no official data for quantities and values of production and marketing of organic beef in Australia. Estimates are based on the opinions of agents in the marketing chain, and various cross-sector surveys using diverse methodologies. Consequently, the quality of the data is variable. Cognisant of this, using the data available, the aim in this paper is to provide a picture of the organic beef industry in the recent past and present in Australia, and to discuss future possibilities.

Organic beef production

In 2000-2001, total farm-gate value for organically produced beef in Australia was estimated at $32 million, with 63 per cent of it (value: approximately $20 million) being sold through the organic market, and the remainder being sold at a lower price through the conventional market (Wynen 2003).
Halpin (2004) claimed that, in 2003, 71 per cent of the estimated 16,000 tonnes (liveweight) of organically produced beef was sold as organic (value: $52.3 million at farm-gate prices), with 4,676 tonnes being sold through the conventional market. However, this translates to $4,530 per tonne, which seems rather high. Assuming an average for trade steers in 2003 of $1760 per tonne liveweight (MLA-NLRS 2006) plus 20 per cent organic premium, and assuming that the liveweight estimate of 11,545 tonnes is correct, a total of around half that farm-gate value is more likely. That is, beef sold through the organic market would have been worth $24.4 million. Sales of the 29 per cent organically-produced beef through the conventional market (at $1,760 per tonne) would have been worth a further $8.2 million, giving a total of organic beef sales for 2003 of $32.6 million (farm-gate prices).

OBE Beef is the largest organic beef producer in Australia, with approximately 70,000 head of cattle. It is located in the Channel country, and has properties in north-western NSW, north-eastern South Australia, south-eastern NT and south-western Queensland. It has moved towards organic management since the mid-1990s.

Industry estimates put the total certified organic beef herd in Australia at 200,000 head in 2005, which implies a total slaughter of approximately 56,000 head (14,500 tonnes carcass). Assuming a carcass price of $4 per kg, this would bring the farm-gate value of organic beef in 2005 to be close to $60 million, which is double that in the early 2000s.

**Organic beef marketing**

Data for the quantity (but not the value) of organic beef exported between 2000 and 2003 are available from AQIS. Because there are no official data for the domestic market, estimates were obtained by interviewing key players in the market (see acknowledgements). Several sources estimated the domestic organic beef market to be 70-80 per cent of the total organic beef market.

The most important processors of organic beef are OBE Beef, Nippon and Australian Country Choice (ACC). They have been active in the organic market since the mid- to late-1990s. Bindaree/Sanger entered the market more recently. All of these producers supply both domestic and export markets.

The largest domestic wholesaler is Cleaver’s, which is supplied by OBE Beef and Nippon. They, in turn, supply Woolworths, Franklins and some Independent Grocers of Australia (IGA) stores. ACC supplies Coles, and Sanger Australia (Bindaree) supplies David Jones and some others, including some IGAs. An overview of this is provided in Table 1.

<table>
<thead>
<tr>
<th>Processors</th>
<th>Wholesale</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBE Beef, Nippon</td>
<td>Cleaver’s, Others</td>
<td>Woolworth, Franklins, IGAs</td>
</tr>
<tr>
<td>Australian Country Choice</td>
<td></td>
<td>Coles</td>
</tr>
<tr>
<td>Bindaree/Sanger</td>
<td></td>
<td>David Jones, IGAs</td>
</tr>
</tbody>
</table>

**Domestic demand**

Originally, organic butcher shops were the main outlet for organic beef. However, in the late 1990s, the large supermarkets, such as Coles and Woolworths, became involved in the organic beef market. The growth in demand caused an increase of percentage of animals sold by producers as organic. Whereas in 2000-2001 around one third of the organically grown animals were sold on the conventional market, this is likely to have drastically declined as several processors and retailers claim that there is now a shortage in Australia of organically produced meat.

14,500 tonnes of certified organic beef carcass-weight sold in 2005 (as estimated by industry sources) converts to 10,000 tonnes of de-boned product. Assuming that it all was sold through the domestic market, both through organic and conventional outlets, then an estimated total retail value of $145 million would seem reasonable. This estimate assumes that 20 per cent was sold as prime organic beef (2,000 tonnes X $25/kg = $50 million), 30 per
centre as organic mince (3,000 tonnes X $15/kg = $45 million) and 50 per cent as conventional mince (5,000 tonnes X $10/kg = $50 million). However, as the amount of beef sold on the domestic market has been estimated at 75 per cent, the retail value of organic beef actually sold through the domestic market would be just over $70 million (i.e., 75 per cent of $95 million).

Another industry source estimated that the total organic domestic beef market (deboned) was approximately 4,000 tonnes in 2005, with 1,000 tonnes being exported. This is close to the estimate of a total of 5,000 tonnes sold as organic beef, with 25 percent, or 1,250 tonnes being exported. However, estimates of exports by AQIS are much lower (Table 2).

**Export**

Export volumes of certified organic beef for the years 2000 to 2003 are derived from data collected and collated by AQIS, and are shown in Table 2.

<table>
<thead>
<tr>
<th>Country</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tonnes</td>
<td>%</td>
<td>tonnes</td>
<td>%</td>
</tr>
<tr>
<td>Japan</td>
<td>98.2</td>
<td>81</td>
<td>103.4</td>
<td>26</td>
</tr>
<tr>
<td>UK</td>
<td>10.3</td>
<td>9</td>
<td>104.2</td>
<td>26</td>
</tr>
<tr>
<td>USA</td>
<td>10.5</td>
<td>9</td>
<td>75.5</td>
<td>19</td>
</tr>
<tr>
<td>Canada</td>
<td>0.0</td>
<td>0</td>
<td>46.1</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>1.5</td>
<td>1</td>
<td>67.3</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>120.5</td>
<td>100</td>
<td>396.5</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: AQIS 2006

The main importers of Australian organic beef were Japan, the UK, the USA and Canada. There was considerable growth in the organic beef export market between 2000 and 2002, but quantities decreased in 2003 to less than half those exported in 2002, presumably because of the drought. Although this decrease seems large, in absolute terms it is only 400 tonnes. No official data are available for 2004 and 2005. The quantities exported through the two main organic certifiers during each of these years was less than 400 tonnes however, which is significantly lower than the unofficial industry estimate of around 1,000 tonnes per year.

Export of Australian organic beef to ‘other’ countries, such as Belgium, France, Germany, Singapore, Hong Kong and Kuwait, was generally much less significant, although this can vary. In 2001, a relatively large shipment went to Switzerland. Currently Korea and Taiwan are importing Australian organic beef.

Total Australian beef exports were 948 kt in 2004-2005 (ABARE 2006). Organic beef exports account for less than 0.1 per cent of this.

**Characteristics of individual export markets for organic beef**

**Japan**

Although Japan originally was a promising importer of Australian organic beef, it presents a number of significant challenges.

Firstly, most Japanese consumers prefer grain-fed to grass-fed beef; most organic beef produced in Australia is grass-fed. Secondly, organic certified beef in Japan requires the birth-date of calves to be provided, a requirement with which many beef enterprises in Australia are unable to comply at present.
These two challenges are not the only obstacles for growth in demand for Australian organic beef in Japan. For this to occur, at least two conditions must be met. Firstly, more information on the definition of ‘organic’ and what this means in practice will need to be available for the discerning Japanese consumer and, secondly, more Japanese retailers will need to become involved in selling organic beef.

One factor that favours imports from Australia is the fact that, at present, meat imports from the USA, EU and South-America are banned on the grounds of past problems, such as FMD (Foot and Mouth Disease) and BSE (Bovine spongiform encephalopathy).

**United Kingdom**
The UK was one of the early markets for Australian organic beef, but is now sourcing much of its organic beef imports from South America, particularly from Argentina and Brazil, where organic beef prices are lower than elsewhere.

Another barrier for increasing beef exports to the EU is that the Australian quota is low, at only 7,000 tonnes (deboned) per year. However, in the past, this quota has not always been filled, and exporters of organic beef have been able to secure part of the quota.

**USA**
The USA market is the most promising for Australian organic beef at present. The total Australian quota of 378,000 tonnes (deboned) is not a barrier for exporters. The demand in the USA for organic products in general has increased dramatically over the last few years. Exporters of organic beef have reported increased sales to this country in recent years.

An additional factor enhancing demand for the Australian product is that, with the exception of Uruguay, South American beef exports to the USA are prohibited.

**Canada**
Canada will continue to import organic beef because it is not suited climatically, both in terms of temperature and seasonality, to compete with major organic beef producers.

**Other importing countries**
Other countries to which Australian beef has exported recently are Korea, Taiwan and Hong Kong.

**Financial considerations**
Premiums for organic produce will always be important for producers. With regards to beef, quotes from various industry sources vary widely between 10 and 30 per cent. One source estimated that 30 to 40 per cent is needed to make organic production profitable. The premium obtained depends on location of production and scale of production/processing, the smaller companies quoting the higher premiums.

However, when considering conversion to organic management, the size of the premium is by no means the only consideration, or even the most important one. Although premiums boost the gross margin, there are extra costs involved with organic management, such as certification costs, insurance costs and the possible opportunity costs of lower productivity per hectare (calving rate and growth rate), depending on local conditions. Because of this, net returns to organic beef production may not increase with the same ratio as the gross margin when converting to organic management. One industry source estimated that, whereas the gross margin (taking into account input and output prices and production) may increase by 25 per cent, the costs (including opportunity costs) may increase by 15 per cent, with a resulting increased net margin of 10 per cent. These figures vary between regions and properties. Also, it should be noted that premiums may decrease as more producers convert to organic management.

**Summary and conclusions**
The Australian organic beef market is no longer oversupplied. Organic beef production has grown at a rapid rate since the late 1990s, from an estimated $32 million (farm-gate prices) in 2000-2001 to approximately $60 million in 2005. The proportion of organically produced beef sold as organic has also increased over this time, such that organic producers can now sell most or all of their beef through the organic market.
About three quarters of the estimated 5,000 tonnes (deboned) of Australian beef sold in 2005 was sold domestically in the retail market, with only one quarter being sold on the export market.

Actual export data indicate that although the figure of around 1,000 tonnes export could have been reached if the trend in the early 2000s had continued, the drought of 2003 probably prevented this from being achieved. It is likely that only around 400 tonnes of Australian organic beef was exported in 2005.

Although, originally, markets in Japan and the UK looked promising, the immediate future for expansion is more likely to be in the USA. The main reasons are that the Australian quota for beef imports into the USA, where demand is growing, is far higher than for the EU, and Australia is one of the few areas with the sanitary conditions (FMD-free) that permit exports to the USA.

Whether organic beef will turn out to be a profitable enterprise for an individual producer depends on a number of factors. Many observers tend to consider product premiums, quoted between 10 and 30 per cent for 2005, to be the key to success. However, other factors such as total production and change in input prices also play a major role in the equation, and need to be carefully considered in any calculations to determine advisability of conversion to organic management.

References Cited

ABARE 2006, Australian Commodities, Table 24, Australian Bureau of Agriculture & Resource Economics, Canberra, Australia.

AQIS (Australian Quarantine & Inspection Service) 1992, National Standard for Organic and Biodynamic Produce, Department of Agriculture, Fisheries & Forestry – Australia, Canberra, Australia.

